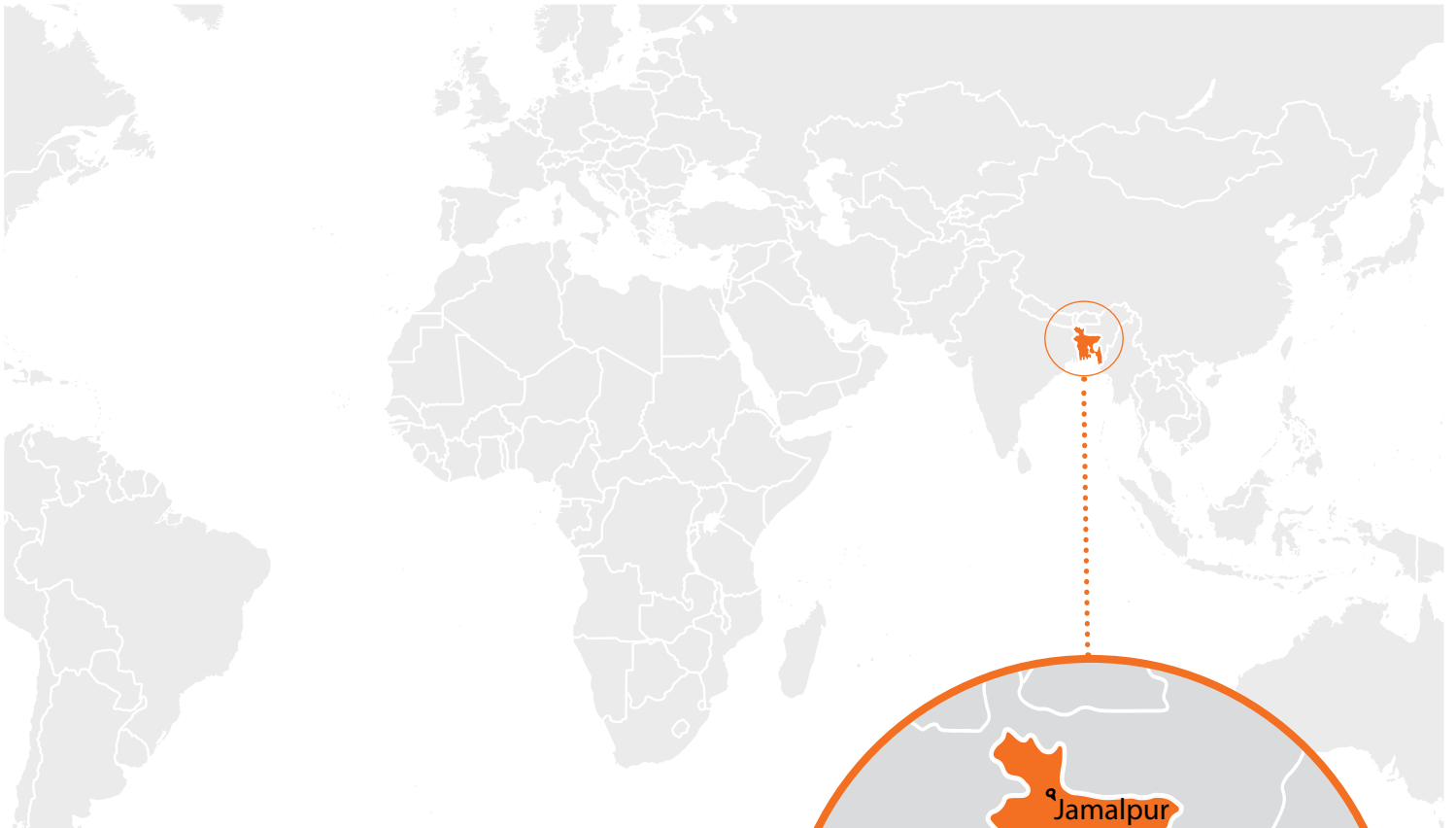


A woman wearing a red headscarf and a red long-sleeved top is crouching in a lush vegetable garden. She is focused on tending to the plants. The garden is filled with various green leafy vegetables. In the background, there is a building with a brick wall on the left and a corrugated metal wall on the right. The overall scene is bright and shows a productive agricultural setting.

# NUTRITION SENSITIVE VALUE CHAINS FOR SMALLHOLDER FARMERS (NSVC)

Bangladesh | Impact Brief  
(2017-2023)



### About this report

This brief summarises the main findings of the endline evaluation for the Nutrition Sensitive Value Chains for Smallholder Farmers (NSVC) project, implemented by World Vision Bangladesh (2017-2023) and local partner organisation Unnayan Sangha. The evaluation was conducted by an independent consulting firm, Centre for Resource Development Studies Ltd., between May and September 2023. Additional data analysis and editing were completed by Rivika Bisht from World Vision Australia (WVA) and independent consultant, Julie Imron. This brief was prepared by Rivika Bisht. For more information, please contact Natasha Tamplin, WVA Country Impact Manager ([natasha.tamplin@worldvision.com.au](mailto:natasha.tamplin@worldvision.com.au)), Rivika Bisht, WVA Evidence Building Advisor ([rivika.bisht@worldvision.com.au](mailto:rivika.bisht@worldvision.com.au)) or Stephen Asim R Chatterjee, NSVC Project Manager ([asimchatterjee@wvi.org](mailto:asimchatterjee@wvi.org)).

The Nutrition Sensitive Value Chains for Smallholder Farmers (NSVC) project was supported by the Australian Government through the Australian NGO Cooperation Program (ANCP).

All photos © World Vision 2023

**Front cover photo:** A community member is learning and implementing improved home gardening techniques through a local NSVC producer group. Participants are encouraged to share their new skills and knowledge with others.





When Parvin joined a producer group through the NSVC project, she was supported to purchase a power tiller using her own capital. Now a successful entrepreneur, she provides tillage services to neighbouring producer groups and has earned enough to purchase a thresher machine.

## EXECUTIVE SUMMARY

|                  |  |
|------------------|--|
| <b>Goal</b>      | To improve economic empowerment and nutrition for <b>20,000 smallholder farmers</b> and their households in Jamalpur |
| <b>Timeframe</b> | <b>2017-2023</b>   |
| <b>Budget</b>    | <b>US\$5.78 million</b>  |

From 2017 to 2023, the Nutrition Sensitive Value Chains for Smallholder Farmers (NSVC) project partnered with communities across Dewanganj, Islampur and Jamalpur Sadar to address the interrelated challenges of poverty and malnutrition in Bangladesh.

### FAMILY IMPACT: CHANGES IN INCOME AND WELL-BEING

**5,713 smallholder families have risen out of poverty.** Improvements were observed across multiple poverty dimensions such as access to electricity,

education for school-aged children and improved sanitation. As a result, the poverty rate across these households dropped from 36 percent at baseline to seven percent at endline. Women-headed households living in poverty also dropped from 35 percent to 10 percent.

**93 percent of households are earning a better living.** Since the start of the project, 18,407 smallholder farmers have boosted their incomes, of which nearly 12,200 are women and 6,207 are men. In contrast, only 22 percent of farmers in non-project areas reported a similar increase in earnings.

**Nearly 70 percent of farmers boosted their income from project-targeted crops.** Median income from targeted crops such as chilli, eggplant, maize and rice tripled. In the same period, households led by women reported enhanced earnings, with the median income increasing by one and a half times. Farmers are earning more because of better knowledge of farming techniques and markets as well as improved access to quality seeds and equipment. They are also negotiating better prices through the collective action of producer groups and are more connected to government-led agricultural extension services.

**Children's health and education are better supported** through enhanced family income. More caregivers can afford healthcare expenses, with 80 percent covering costs with their own money (up from 45 percent). Meanwhile, the percentage of caregivers able to pay for their children's education jumped from 63 percent to 93 percent.

**Children and women are healthier** due to initiatives targeting nutrition and parenting behaviours. Men were engaged as change agents to address gender inequalities and challenge harmful gender norms impacting women's health and nutrition. In project areas, wasting rates for children under five decreased from 22 percent to eight percent. Wasting among women of reproductive age (15-49 years) decreased from eight percent to nearly zero percent. With farmers growing more vegetables, family members benefited from a more diversified diet. Girls and women also experienced better nutrition due to women's increasing empowerment.

**Family gender roles are more balanced**, with men spending two hours more time on childcare per week – and women spending one hour less. Overall, men participated more in domestic activities while food distribution was more equitable within the family and for pregnant women.

**More women are contributing to the household income and feeling recognised for their efforts.** Overall, 67 percent of women reported earning a regular income compared to 27 percent mid-project. More women are saving money, with 67 percent reporting having savings (up from 33 percent). Women's leadership and economic participation were encouraged through interventions such as financial literacy training and business development coaching.

**More people with disability and women are taking up leadership roles.** Overall, 2,623 women and people with disability adopted management positions for their producer groups. Executive leadership is also growing, with 16 people with disability on producer group executive committees. Meanwhile, more women are leading mixed-gender producer groups in the role of chairperson (41 percent compared to 33 percent mid-project).

## **ECONOMIC CHANGE: INCLUSIVE MARKET SYSTEMS**

**Local businesses and producer groups made over US\$6.8 million over six years.** Since the project started in 2017, 19,771 smallholder farming households have formed 800 producer groups to collectively sell their products and purchase inputs. For every dollar spent by the project, the equivalent of \$1.18 was injected into the local economy

through purchases to wholesale buyers, farming suppliers and entrepreneurs, as well as through collective sales made by farmers.

**More women are included in Jamalpur's farming markets.** This is significant in an economic environment that typically excludes women from income generation and markets. The project created 227 jobs for farmers as community sales agents and entrepreneurs, who are supporting farmers with vital inputs and services. Of the 227 entrepreneurs empowered by the project, 66 percent are women. These include 119 women providing farming services, such as tilling and threshing, and inputs such as seeds, fertilisers and saplings. Another 31 women are working as input and output sales agents. The project co-invested in these enterprises, with many women now earning monthly profits equivalent to the national minimum wage. Their services help create a competitive and more efficient market system.

**Even farmers outside the project are benefiting from its last-mile services.** Community sales agents and women entrepreneurs have become important market system actors in the local economy, catering to untapped demand and market potential for their services in the region. In total, 17,796 farmers in non-project areas have accessed their services, which reflects the potential of these market actors.

## **COMMUNITY IMPACT: STRENGTHENING PUBLIC SERVICES**

**Families are better supported through connections to public sector services such as health centres and agriculture support officers.** More pregnant women are attending antenatal care check-ups while agricultural extension officers are more closely supporting farmer groups with technical support. Moreover, via a collaboration with World Vision Bangladesh's BleNGS (Bangladesh Initiative to Enhance Nutrition Security and Governance) project, community sales agents have access to biofortified zinc-rice seeds to sell to farmers. Health and government agriculture services were also strengthened through the BleNGS project as part of a community-led social accountability approach called Citizen Voice and Action. The partnership also resulted in a unified approach to guidance on nutrition, hygiene and health, in collaboration with public health services.

**Farmers with disability are now accessing social services and safety nets from the government.** Through advocacy efforts, 469 people with disability were registered with the Department of Social Welfare and 258 now receive monthly social safety net payments.

## CONTEXT

Despite significant progress in reducing poverty over recent years, Bangladesh still has about 35 million people living below the poverty line.<sup>1</sup> Close to 50 percent of the country's population is employed in agriculture, with rice the most widespread crop. Many in rural areas still practice subsistence farming.

The economy recovered strongly from the COVID-19 pandemic, however high inflation is putting significant pressure on many people, particularly the poor.<sup>2</sup> Bangladesh also has one of the highest rates

of child stunting and malnutrition in the world, with stunting present in 28 percent of children under five years old.

Poor nutrition is closely linked to gender inequality. Just over 50 percent of women and girls are married before the age of 18 and high levels of early marriage significantly increase the chances of early pregnancy.<sup>3</sup> Due to harmful social norms, women and girls often eat "last and less", with 46 percent of women of reproductive age suffering from anaemia.<sup>4</sup>



Solaiman (right) and his wife are updating their finance records together. Since attending MenCare sessions through the NSVC project, the couple approach financial decisions much more collaboratively.

- 1 Asian Development Bank. *Bangladesh and ADB: Poverty Data* (2023): <https://www.adb.org/countries/bangladesh/poverty>
- 2 Department of Foreign Affairs and Trade (DFAT). *DFAT Country Information Report Bangladesh* (2022): <https://www.dfat.gov.au/sites/default/files/country-information-report-bangladesh.pdf>
- 3 UNICEF. *Bangladesh: Nutrition* (2023): <https://www.unicef.org/bangladesh/en/nutrition>
- 4 Osmani, S. R., Ahmed, A., Hossain, N., Huq, S., & Shahan, A. *Strategic Review of Food Security and Nutrition in Bangladesh*. World Food Program (2016): <https://reliefweb.int/report/bangladesh/strategic-review-food-security-and-nutrition-bangladesh>

# PROJECT OVERVIEW

## LOCATION

Since 2017, World Vision has implemented the Nutrition Sensitive Value Chains for Smallholder Farmers (NSVC) project in Jamalpur District, one of the least developed regions in northeast Bangladesh. According to the World Bank, 34 percent of its population is classified as extremely poor, and 51 percent as poor, both exceeding the national average.<sup>5</sup> The six-year project worked with a local NGO, Unnayan Sangha, to cover three sub-districts in Jamalpur: Jamalpur Sadar, Islampur and Dewanganj.

## PROJECT GOAL

*To improve the economic empowerment and nutrition of 20,000 smallholder farmers and their households in Jamalpur, with a focus on women's economic empowerment.*

This goal was aligned with Bangladesh's Seventh Five Year Plan, which identifies key challenges for nutrition-specific programs in the country.

## PROJECT BACKGROUND

The project responds to global evidence highlighting the link between women's empowerment and improved child nutrition.<sup>6</sup> While poverty and undernutrition are correlated, evidence also suggests that better incomes do not necessarily lead to better nutrition. According to the World Bank, improved nutrition depends on how much of that income is controlled by women.<sup>7</sup> As well as promoting nutritious food, the project prioritised both income and women's empowerment pathways to improve the nutritional status of poor households.

## FUNDING

Supported by the Australian Government's NGO Cooperation Program (ANCP) with co-funding from World Vision Australia and the Australian people, the project also benefited from linking with the European Union-supported BleNGS project. Both projects shared similar objectives and collaborated closely to deliver consistent nutrition-based initiatives.

## OUTCOMES

The project goal was achieved through three planned outcomes:

### 1. Male and female farmers increase their income

Achieved through a range of inclusive and sustainable initiatives, including: collective buying and selling by farmer groups; improved productivity in farming; building market connections; improving financial literacy; and, growing resilience to climate change and disasters.

### 2. Families eat more nutritious foods

Building knowledge of inclusive nutrition, health-seeking and child-feeding practices, as well as boosting access to nutritious food.

### 3. Farmer households have increased gender-equitable relations

Supporting farming households to make equitable decisions around money and nutrition and building community support for women's empowerment.

5 World Bank. *Bangladesh Interactive Poverty Maps* (2016): <https://www.worldbank.org/en/data/interactive/2016/11/10/bangladesh-poverty-maps>

6 World Vision Australia. *Research in Brief: Linking Children's Wellbeing with Women's Empowerment* (2022): <https://www.wvi.org/publications/research/equality-and-empowerment-linking-womens-empowerment-child-well-being>

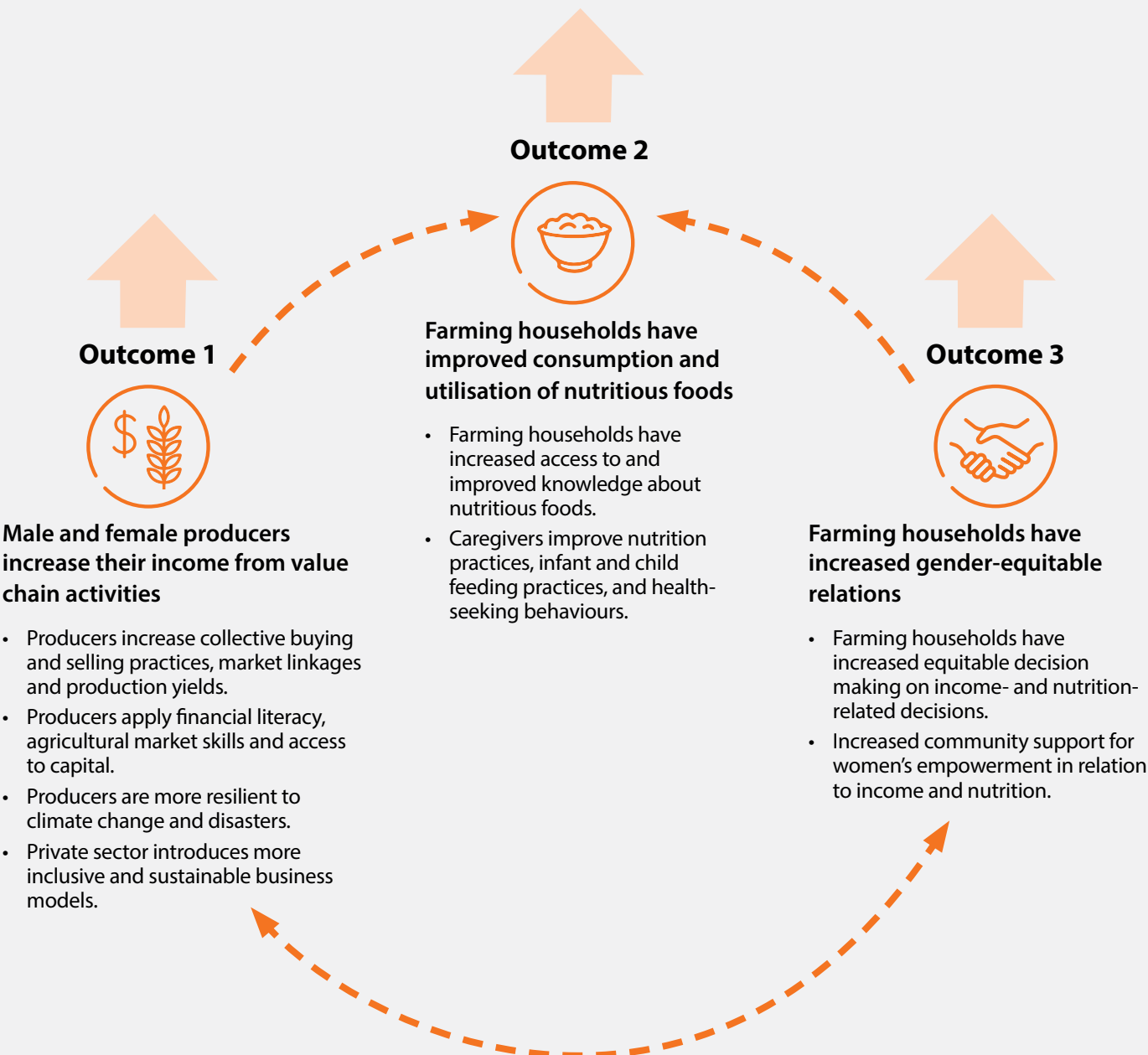
7 World Bank. *Improving Nutrition Through Agriculture* (2013):

<https://documents1.worldbank.org/curated/en/625661468329649726/pdf/75102-REVISED-PUBLIC-MultisectoralApproachestoNutrition.pdf>

# THEORY OF CHANGE

**Figure 1: Project theory of change**

**Project Goal: To improve economic empowerment and nutrition for 20,000 smallholder farmers and their households in Jamalpur**



# CORE PROJECT APPROACHES

## INCLUSIVE MARKET SYSTEMS DEVELOPMENT (IMSD)

This initiative promotes systemic changes that enable the market to include poor and marginalised groups while strengthening their productive capacity.

The project worked with market actors and private sector partners to develop inclusive and resilient business models while engaging poor women and men as producers, employees and consumers. Household interventions, including business, financial literacy and market linkage training helped to ensure equitable market participation and build resilience.

## NUTRITION SENSITIVE AGRICULTURE

This approach aims to maximise agriculture's contribution to nutrition. Consistent with DFAT's Operational Guidance on Nutrition Sensitive Agriculture (2015)<sup>8</sup>, the project improved nutrition through key 'pathways':

- 1) agriculture as a source of income (**income pathway**);
- 2) a source of food (**production pathway**);
- 3) a driver of food prices (**market pathway**); and,
- 4) a way to empower women (**women's empowerment pathway**).

Activities included establishing micro-nutrient gardens and raising awareness of nutritious foods and equitable food distribution, as well as behaviour change communication on hygiene.

## WOMEN'S ECONOMIC EMPOWERMENT (WEE):

This approach addresses gender-based constraints by transforming gender relations in households, communities and market systems to provide equitable opportunities for women.

Activities include MenCare sessions, which engage men as change agents to address gender inequalities in parenting and at home. Originally designed by US-based NGO Equipundo, MenCare challenges harmful gender norms impacting women's health and nutrition.



Women and men farmers who participate in the NSVC project are working alongside one another collaboratively in their fields, putting into action their new skills, knowledge and inclusive approaches to farming.

8 DFAT. Operational Guidance on Nutrition Sensitive Agriculture (2015): <https://www.dfat.gov.au/sites/default/files/operational-guidance-note-nutrition-sensitive-agriculture.pdf>



# EVALUATION OVERVIEW

## OBJECTIVES

World Vision Bangladesh commissioned a Bangladeshi research consulting firm, the Centre for Resource Development Studies, to perform an endline evaluation of the NSVC project from April to September 2023. The evaluation's objectives were to assess the project's progress towards achieving its goal (impact) and outcomes (effectiveness) and to assess its relevance to the community and its achievements towards sustainability and efficiency.

A review of the report and additional data analysis were later conducted by World Vision Australia and Julie Imron, an external consultant. The review considered services provided by the project and compared results to baseline data in both project and non-project areas. This allowed World Vision Bangladesh to adjust its interventions for the next project phase, Gender-Inclusive Market Systems for Improved Nutrition, and expand to new areas.

## METHODOLOGY

In 2023, the study collected project field data between May 21 and June 2 across five upazilas, including two upazilas not covered by the project. The study followed a mixed-method approach, combining quantitative and qualitative data collection methods. These included focus group discussions and interviews with project participants, non-project farmers and key stakeholders.

The survey employed a stratified random sampling method to select respondents, using the following sub-groups: producer groups; couples participating in both MenCare and producer groups; and producer group members who received support through infant and young child feeding (IYCF) interventions.

Findings were reported in comparison to baseline levels obtained at the start of the project. If unavailable, midline evaluation results were used. Secondary data such as project monitoring data and qualitative data was used to triangulate results and provide a more in-depth understanding of findings.

## LIMITATIONS

- The size and representativeness of the non-project (control) group were limited, making comparisons with project groups not always relevant and reliable.

- Some indicators were only measured at midline and endline evaluations, giving only a partial picture of project impact. Similarly, some indicators were neither measured at baseline nor midline, preventing any comparison with previous values. This was mitigated by collecting additional qualitative information.
- Study participants in the non-project area of Madarganj suffered from floods, which damaged their crops and occupied their time during qualitative data collection. Information collected in that region is therefore partial.
- Key informant interviews with stakeholders yielded limited and poor qualitative information. Data collection time was also reduced due to Eid holidays.
- There was a much smaller number of respondents for non-rice value chains, such as chilli. Therefore, results disaggregated by "type of commodity" are not representative (especially for crops other than rice).
- No significant difference was observed between the economic and government services available in the control and treatment groups. This is likely because all upazilas are situated within the same geographical area and operate under the same market system.
- People with disability and their representative organisations were not purposively interviewed in the evaluation.



A mother who participated in infant and child nutrition training through the NSVC project is feeding her young child a balanced meal with diverse ingredients.

# EVALUATION FINDINGS

## GOAL: SMALLHOLDER FARMERS AND THEIR FAMILIES HAVE IMPROVED ECONOMIC EMPOWERMENT AND NUTRITION

| Indicator   | Project area                           |                                   | Non-project area            |                             |
|---|--|-----------------------------------|-----------------------------|-----------------------------|
|   | Baseline value (2018)                  | Endline value (2023)              | Baseline value              | Endline value               |
| % of households in multidimensional poverty <sup>9</sup>  | 36.30%                                 | 7.40%***                          | 35.0%                       | 13.0%                       |
| Number of poor women and men with increased incomes <sup>10</sup>   | 14,915<br><i>Midterm value of 2021</i> | 18,407***                         | Not measured                | Not measured                |
| % of caregivers who are able to pay for their children's health costs without assistance (services from medically trained or skilled service providers) | 45.1%                                  | 80.0%***                          | 39.3%                       | 86.9%                       |
| % of school-aged children whose caregivers are able to pay for all their education costs  | Boys: 66.2%<br>Girls: 58.8%            | Boys: 94.1%***<br>Girls: 92.4%*** | Boys: 71.7%<br>Girls: 70.9% | Boys: 88.1%<br>Girls: 87.5% |
| % of wasting in children aged six to 59 months, determined by mid-upper arm circumference (MUAC)  | 21.6%                                  | 7.9%***                           | 21.6%                       | 28.3%                       |
| % wasting in women of reproductive age (15-49) using MUAC   | 8.4%                                   | 0.3%***                           | 10.9%                       | 1.7%                        |
| % of men and women involved in rewarding/influential roles in the project's target value chains <sup>11</sup>   | Women: 4.8%<br>Men: 11.4%              | Women: 53.5%<br>Men: 70.2%        | N/A                         | N/A                         |
| <b>Chilli</b>   | 8.2%                                   | 56.4%                             | N/A                         | N/A                         |
| <b>Rice</b>   | 9.0%                                   | 56.0%                             | 10.0%                       | 38.7%                       |
| <b>Maize</b>  | 0.0%                                   | 58.6%                             | N/A                         | N/A                         |
| <b>Eggplant</b>   | 15.4%                                  | 54.8%                             | N/A                         | N/A                         |
| Average number of hours per day (in the past week) spent on childcare by men and women (for children under 5)   | Men: 7.2<br>Women: 11.9                | Men: 8.7<br>Women: 11.0           | Men: 8.3<br>Women: 9.0      | Men: 3.0<br>Women: 8.7      |
| % satisfied with their use of time  | 14.1%                                  | 86.5%***                          | 12.1%                       | 40.5%                       |

Please note: \*\*\* and \*\* indicate significance at the 1 and 5 percent critical levels.

<sup>9</sup> As defined by the global Multidimensional Poverty Index (MPI).

<sup>10</sup> ANCP Monitoring, Evaluation and Learning Framework (MELF) indicator.

<sup>11</sup> Baseline and endline followed a slightly different calculation method for this indicator's gender-disaggregated results. Therefore, the overall figure for the proportion of women and men has been estimated using results for rice – the most common crop.

Evaluation results showed significant achievement towards the project goal:

- The proportion of households in multidimensional poverty reduced significantly, falling from 36 percent at the start of the project to 7.4 percent. At endline, just seven percent of male-headed households and 10 percent of female-headed households were living under the poverty threshold.
- With families earning more money, children's well-being improved. Wasting among mothers and children under five dropped while the ability of caregivers to pay for their children's health and education costs increased.
- 70 percent of men and 53 percent of women interviewed said they are engaged in more rewarding and influential roles across different value chains.
- Men reported spending nearly one and a half more hours caring for children under five, while women spent nearly one hour less on childcare, indicating a more equitable relationship between parents. However, women were still spending an average of two hours more per week caring for children under five. This coincides with a significant increase in satisfaction over time use: women's satisfaction jumped from 12 to 85 percent, while men's increased from 18 to 93 percent.

## OUTCOME 1: MALE AND FEMALE FARMERS INCREASED THEIR INCOME

|  |                    | Project area  |                                 | Non-project area |         |
|--|--------------------|---|---------------------------------|------------------|---------|
|  |                    | Baseline  | Endline                         | Baseline         | Endline |
| Proportion of households earning income from target crops/product      | <b>All</b>         | <b>57.1%</b>  | <b>68.9%***</b>                 | 39.7%            | 47.0%   |
|  | Chilli             | 16.5%   | 8.5%***                         | 12.8%            | 2.0%    |
|  | Rice <sup>12</sup> | 33.6%   | 52.3%***                        | 24.1%            | 43.5%   |
|  | Maize              | 6.8%  | 20.3%***                        | 1.7%             | 1.5%    |
|  | Eggplant           | 6.6%  | 4.5%                            | 4.7%             | 1.5%    |
| Median total household income from sale of target crops/products (BDT) |                    | 10,500  | 32,450***                       | 12,000           | 29,800  |
| % of women and men earning a regular income                            |                    | Men: 61.1%<br>Women: 26.9%<br><i>Mid-term value from 2021</i> | Men: 58.0%<br>Women: 66.7%***   | N/A              | 52.0%   |
| % of women and men with individual and household savings               |                    | Men: 41.6%<br>Women: 33.3%<br><i>Midterm value from 2021</i>  | Men: 66.2%***<br>Women: 61.4%** | N/A              | 34.5%   |

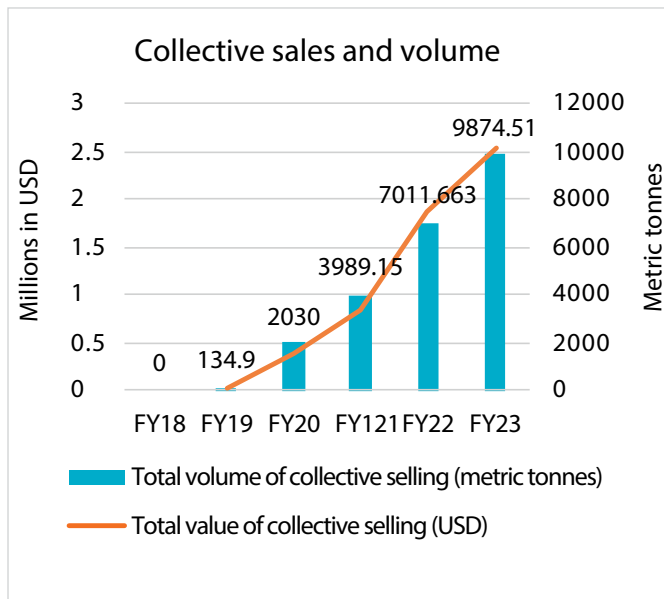
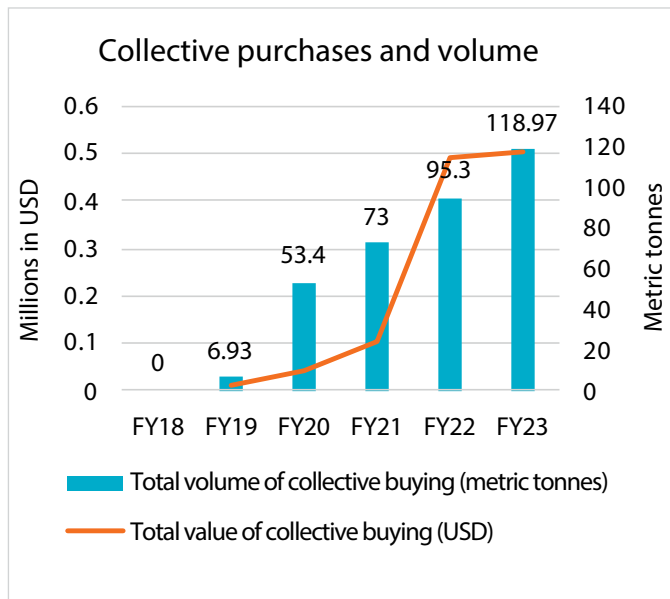
Please note: \*\*\* and \*\* indicate significance at the 1 and 5 percent critical levels.

Over the project's lifetime, significant progress was made towards increasing the income of male and female farmers:

- More than two-thirds of people surveyed were earning money through the project's targeted value chains: rice, maize, chilli, eggplant and leafy green vegetables. These crops provide both an income and a source of nutrition for many families. At endline, the proportion of households earning income from rice and maize was higher than chilli and eggplant.
  - By the end of the project, all project participants had adopted improved agriculture practices which they applied to all crops. Adoption ranged from 13 to 35 percent at baseline for various crops and jumped to a 100 percent adoption rate at endline for all crops.
- This was due to significant awareness-raising efforts as well as the development of an inclusive market system approach, which aimed to remove barriers such as lack of access to quality seeds and services required for farming.
- Collective purchases of improved farming inputs increased from one percent at baseline to 74 percent, while collective selling of produce increased from just under two percent to 64 percent. This has created a more efficient market system for the farmers in Jamalpur.
  - 773 out of 800 project producer groups bought and sold collectively in the final year. Over the lifetime of the project, the total value of these collective transactions amounted to over US\$6.8 million. This is equivalent to about US\$7,348 per producer group.

<sup>12</sup> Rice is fortified with zinc.

**Figure 2: Trend of annual collective purchases and sales from 2018 to 2023**



## BUILDING RESILIENCE TO CLIMATE CHANGE AND DISASTERS

Bangladesh is ranked seventh in the world for climate risk.<sup>13</sup> To address this, the NSVC project worked with government agencies such as local disaster management committees to improve access to early warnings and disaster risk mitigation strategies. The project also promoted disaster-tolerant seed varieties.

Evaluation results found:

- There was significant adoption of at least one non-structural farming practice to help mitigate disasters, with adoption increasing from 39 percent at baseline to 95 percent. Adoption rates for improved crop varieties were above 80 percent across all crops, which is very encouraging. Improved crops included high-yielding and pest/disease-resistant plant varieties, as well as those better adapted to local agro-climatic conditions.
- More producers have access to early warning information (up from five percent to 22 percent), although this needs strengthening in all areas, particularly in Dewanganj. The main source of information remains informal, through friends and family, but about a quarter of concerned farmers received an SMS or call from local authorities. Just over 17 percent received a voice message from the local disaster management committee.
- 72 percent of the farmers reported feeling more confident in their capacity to cope with climate change and natural disasters but this proportion



Women and men producer group members from the NSVC project are collecting seeds to sell to other farmers and community members.

was slightly lower among women. Overall, this is a great improvement from the midline evaluation (39 percent) and compared to the control group (three percent).

- Almost 75 percent of rice farmers are using flood-tolerant varieties of rice, although fewer maize growers were using drought-tolerant varieties (only 20 percent). Extreme weather-tolerant chilli varieties were also introduced by the seed company AR Malik Seed. These were promoted through networking with community sales agents and the establishment of three demonstration plots.
- Homestead gardens were introduced with features to adapt to severe weather conditions. These included practices such as raised beds, drainage and the use of drought-tolerant and flood-resistant crop varieties.

<sup>13</sup> Eckstein, D., Künzel, V., & Schäfer, L. *Global Climate Risk Index 2021*. Germanwatch (2021): <https://www.germanwatch.org/en/19777>

## OUTCOME 2: FAMILIES EAT MORE NUTRITIOUS FOOD

| Indicator  | Project area      |                  | Non-project area  |                  |       |
|--|-------------------|------------------|-------------------|------------------|-------|
|  | Total             |                  | Total             |                  |       |
|  | Baseline<br>[637] | Endline<br>[639] | Baseline<br>[642] | Endline<br>[200] |       |
| % of children six to 23 months receiving a minimum dietary diversity in the last 24 hours                              | All               | 12.7%            | 75.8%***          | 8.9%             | 68.2% |
|  | Boys              | 15.5%            | 74.6%***          | 5.8%             | 71.8% |
|  | Girls             | 9.9%             | 76.9%***          | 12.9%            | 65.2% |
| Average household dietary diversity score  |                   | 7.8              | 8.2**             | 7.4              | 8.1   |
| % of women who increased food consumption during their most recent pregnancy   |                   | 43.4%            | 71.3%***          | 37.5%            | 48.8% |
| Average frequency of household consumption of grown vegetables in the past seven days                                  |                   | 1.33             | 3.4**             | 0.9              | 2.1   |
| Average frequency of household consumption of flesh food in the past seven days  |                   | 4.2              | 4.6**             | 4.0              | 3.8   |
| % of children exclusively breastfed from birth up to six months  |                   | 61.1%            | 74.0%             | 37.0%            | 67.0% |
| % of mothers who report that they had four or more antenatal visits while they were pregnant with their youngest child |                   | 15.8%            | 71.5%***          | 18.0%            | 36.5% |

Please note: \*\*\* and \*\* indicate significance at the 1 and 5 percent critical levels.

The project's holistic approach to nutrition, which included connecting families with public health services, encouraging home gardening and raising awareness about gender norms, has had a significant impact on both household food consumption and women's health. Moreover, through a collaboration with the EU-funded BleNGS project, farmers now have access to biofortified zinc-rice seeds. The partnership also resulted in a unified approach to providing guidance on nutrition, hygiene and health.

Other notable changes included:

- Strengthened food security, with more families eating homegrown meat and vegetables on a regular basis.
- Better maternal nutrition, with almost 30 percent more women eating larger quantities of food during their last pregnancy. Food consumption for pregnant women also increased in non-project areas but to a smaller degree, probably because of awareness-raising work by local health facilities.
- Pregnant and breastfeeding mothers also nurtured their health by attending more antenatal clinic visits during their pregnancies.

## OUTCOME 3: FARMER HOUSEHOLDS HAVE INCREASED GENDER-EQUITABLE RELATIONS

| Indicator  |              | Project area                          |          | Non-project area |         |
|--|--------------|---------------------------------------|----------|------------------|---------|
|  |              | Total                                 |          | Total            |         |
|  |              | Baseline                              | Endline  | Baseline         | Endline |
|  |              | [637]                                 | [639]    | [642]            | [200]   |
| % of women who feel their economic roles/ contribution within the household and community is recognised                        | Some extent  | 68.7%<br><i>Midterm value of 2021</i> | 52.8%    | N/A              | 42.9%   |
|  | Great extent | 27.7%<br><i>Midterm value of 2021</i> | 40.9%*** | N/A              | 17.1%   |
| % of men who recognise women's economic roles/contribution within their household and community                                | Some extent  | 66.4%<br><i>Midterm value of 2021</i> | 55.0%    | N/A              | 70.0%   |
|  | Great extent | 23.2%<br><i>Midterm value of 2021</i> | 38.2%*** | N/A              | 16.7%   |
| % of women who have high freedom of movement to access program-related services  |              | 81.4%<br><i>Midterm value of 2021</i> | 85.8%**  | N/A              | 51.4%   |
| % of people in agreement with harmful gender attitude statements: "It is okay for a man to beat his wife if she disobeys him." |              | 47.4%                                 | 20.0%*** | 42.7%            | 17.0%   |

Please note: \*\*\* and \*\* indicate significance at the 1 and 5 percent percent critical levels.

Women are experiencing greater recognition for their contribution at home and on the farm. This has resulted from the project's conscious efforts to encourage women to hold more important roles within their farming businesses, such as sorting and selling harvests, buying inputs and entrepreneurship. These actions have helped to increase their status within households.

Several changes were observed:

- Food distribution among household members is more equitable, especially in terms of children's nutrition and food intake for pregnant women.
- Men's participation in domestic activities has increased. However, about one-third of respondents still didn't observe an increase in men's participation in domestic work.
- Fewer households believe in harmful gender norms related to domestic violence, but more work remains to be done to address these issues.
- During focus group discussions, both men and women said the MenCare approach helped to prevent domestic violence. They reported the

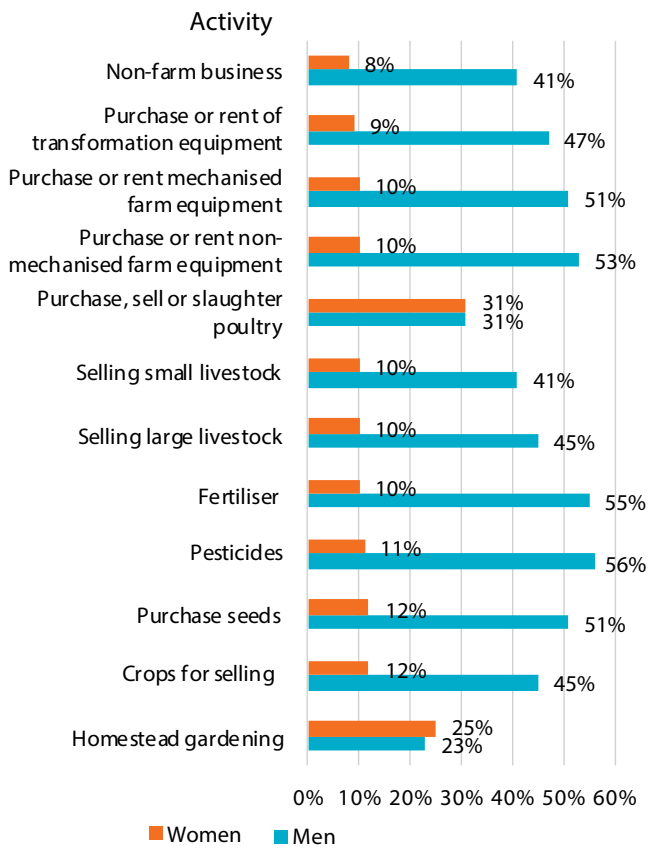
sessions helped improve their knowledge about prenatal care, women's health and nutrition and the importance of a balanced diet. Many participants said their families started to sit and share their meals together because of the messages promoted during MenCare sessions.

### DECISION MAKING

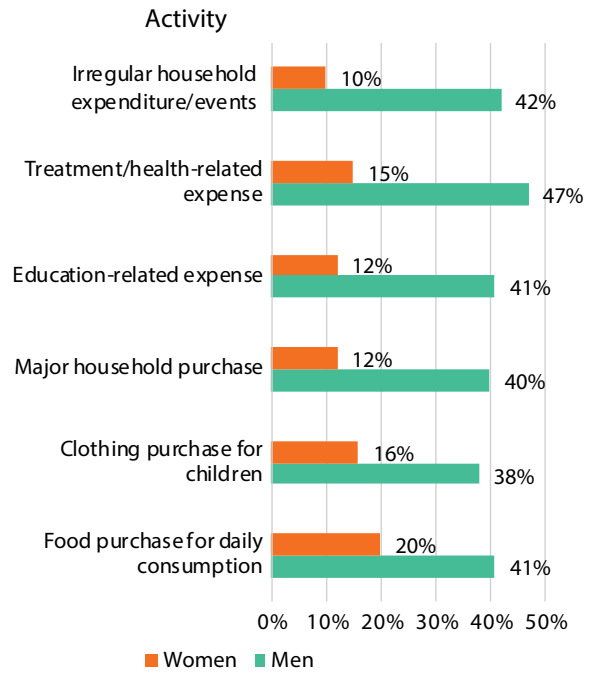
Results were mixed in terms of women's decision making, with over 80 percent of women holding low decision-making power for both farming and non-farming expenses (82 and 83 percent respectively). The only decision where women reported slightly more equitable power (Figure 3) was in relation to poultry (31 percent) and homestead gardening (25 percent).

Yet, opposite results are observed for the statement: "Men must make the final decision on how money is spent." While 43 percent of men and women supported this statement at the start of the project, this dropped to 29 percent at endline. These mixed results might be attributed to the time it takes to shift knowledge and practice of gendered and social norms.

**Figure 3: Primary decision-maker for income-generating activities by gender at endline**



**Figure 4: Primary decision-maker for non-income-generating activities by gender at endline**



Rina, an NSVC project participant, now enjoys a daily supply of fresh and nutritious vegetables from her home garden. Growing her own produce has helped Rina diversify her children's meals and save money by selling any surplus vegetables to her neighbours.

# SUSTAINABILITY

The project made significant progress in securing its long-term sustainability, especially in terms of market systems development and the continued operation of producer groups. While US\$5.8 million was invested by the project, a total value of \$6.8 million was created in the local market system over six years. This included \$1.1 million in private sector income through selling improved inputs to farmer groups at a cheaper price, while producer groups made \$5.7 million from the bulk sale of their produce.<sup>14</sup> As a result, for every dollar spent, \$1.18 was injected into the local economy as income to project partners, such as wholesale buyers, seeds and farming suppliers and entrepreneurs.

In total, 227 jobs were created for community sales agents and women entrepreneurs who are servicing not only the 19,771 NSVC project households but also reported reaching an additional 17,796 non-project farmers, ensuring their longevity. As well as improving family wellbeing, women's contribution to the household income is a key incentive for gender norm change. However, more improvement is necessary in community attitudes towards women's agency, especially when it comes to sharing key decisions.

*“We all know that the contribution of women in agriculture [is] increasing as days are passing but we are not habituated to deal with female producers and entrepreneurs at our outlets/business centres. From this training I realised that we need to value them more every time they approach us as client/customer.”*

—Dealer from private sector company AR Malik Seed (Quote sourced from the NSVC 2023 annual report.)

To ensure that market connections continue, the project piloted training of selected private sector actors in the MenCare approach. This training focused on gender norms that affect the enabling business environment of women in agriculture. These training courses were positively perceived by participants and there are plans to scale this model in the project's second phase.



Hafizur, a community sales agent, is updating his records. Through the NSVC project, 227 jobs were created for community sales agents and women entrepreneurs who help farmers access markets and purchase high-quality supplies.

<sup>14</sup> This excludes income to farmers and market actors through individual buying and selling. As a result of the project, 74 percent of farmers are collectively purchasing inputs and 64 percent are collectively selling produce.



# GENDER EQUALITY, DISABILITY AND SOCIAL INCLUSION

In Bangladesh, women are systematically excluded from agricultural business opportunities, with limited interaction with markets. Social and cultural discrimination prevents women from accessing business skills, resulting in imbalanced power dynamics within households. Men typically serve as primary breadwinners for the family while women possess limited decision-making authority regarding income generation. However:

- The project helped to advance the role of women in agriculture by creating a job pool of 119

entrepreneurs and 31 community sales agents. These women are providing last-mile services to poor farmers through door-to-door seeds, power tillers, nurseries and as agricultural buyers.

- The project supported 2,616 women to take leadership of producer groups. This leadership was instrumental in increasing women's access to group support and increasing women's bargaining power when running economic activities.

**Figure 5: Value and contribution of women-run enterprises to the local market**

| Type of business              | Total women entrepreneurs in business | Total value of the product/services sold (USD) | Producer group members served | Non-producer group members served |
|-------------------------------|---------------------------------------|--|-------------------------------|-----------------------------------|
| Mobile seed seller            | 20                                    | 12,782   | 1,403                         | 1,097                             |
| Irrigation                    | 18                                    | 8,037  | 508                           | 215                               |
| Power tiller                  | 18                                    | 26,260   | 1,877                         | 785                               |
| Spray machine                 | 17                                    | 577  | 599                           | 202                               |
| Power thresher                | 13                                    | 6,449  | 354                           | 213                               |
| Fertiliser and seed seller    | 10                                    | 10,742   | 846                           | 603                               |
| Vegetable seeds and seedlings | 4                                     | 1,310  | 315                           | 121                               |
| Coco-pit nursery              | 2                                     | 122  | 50                            | 40                                |
| Output                        | 2                                     | 1,867  | 280                           | 504                               |
| Turmeric, chilli, spices      | 2                                     | 63   | 135                           | 63                                |
| Nursery                       | 1                                     | 5,101  | 85                            | 175                               |
| Fuel for agriculture          | 1                                     | 315  | 70                            | 70                                |

- A total of 2,623 vulnerable people (women or people with disability) are in management positions within producer groups. Furthermore, the proportion of women holding the chairperson's position in mixed-gender producer groups increased to 41 percent from 33 percent at midline.
- 3,859 people with disability were included through producer groups, while 469 were connected with social government services due to community awareness-raising efforts. Their official registration as people with disability further facilitates their access to different government services and support programs.

*"I do not only thresh rice, but also wheat and mustard grain using my rice thresher. As a result, my overall income has significantly increased. Moreover, I utilise my earnings to invest in livestock, poultry and ducks. I am now content with my financial situation and lifestyle."*

—Woman entrepreneur, Jamalpur

# LESSONS

## SEVERAL LESSONS WERE DISCOVERED THROUGH THE EVALUATION:

- Farmers embraced collective purchasing and selling practices. This, along with increased connections to value chain actors (such as project-supported community sales agents and women entrepreneurs) has made it much easier for farmers to access markets, labour or services and purchase high-quality inputs. This approach should be considered for scaling up in future projects.
- Despite the profitability of target value chains, this was not the key determinant of large-scale cultivation. For example, eggplant and chilli are more profitable than rice and maize, yet significantly fewer producers are cultivating them. Other factors that determine large-scale adoption of value chains, beyond profitability, need to be explored in future projects.
- The reliance on men's contribution in domestic work and childcare to reduce women's workload was not wholly successful. While the project encouraged men to assist with domestic tasks, this support was sporadic and mainly occurred during leisure periods. Shifting deeply entrenched gender norms are more likely to require longer-term efforts.
- Women's involvement in income-generating activities was recognised and appreciated by their family as it contributed to the household income. However, the level of acceptance of these activities varied depending on what type of work women were undertaking. More effort is needed to enhance community and family acceptance of income-generating activities for women that are largely men dominated.
- Homestead gardening production may have limitations due to cropping seasons, cost-effectiveness of garden design, and access to water. Seasonality, cost and water access may need to be considered in future designs.



Jannatul took part in gardening demonstrations through the NSVC project in 2022. Through this practical training, she was motivated to make changes to her own garden to improve crop yields. Using rotating beds and establishing a drainage and compost system have helped her produce to flourish.

# CONCLUSION AND RECOMMENDATIONS

The evaluation showed that poor farming households in Jamalpur benefited significantly from the NSVC project. The project had a big impact on food security, reduction of wasting among children and women in reproductive age, reduction in poverty through income generation, and the economic empowerment of these households.

As per Outcome 1, income increased for nearly all farming households, with some variations between commodities. Families were using and eating more nutritious food, as per Outcome 2, however with some disparities between sub-districts. Outcome 3, which focused on gender-equitable relations, showed progress in several key aspects, but still lagged behind with regards to women's mobility, decision making and gender-based violence.

The project will continue to improve on its achievements over the next five years under Phase 2 of its implementation, with continued support from the Australian Government through the ANCP grant.

## KEY RECOMMENDATIONS

### OUTCOME 1: FEMALE AND MALE FARMERS INCREASE THEIR INCOME

- Further strengthen the business portfolio of community sales agents and women entrepreneurs by growing products/ services in their basket, creating associations, increasing access to finance or targeting niche markets.
- Encourage the formation of associations or cooperatives among last-mile agents to pool their resources, share knowledge and negotiate better deals with market actors.
- Institutionalise the more advanced producer groups into registered community-based organisations.
- Enhance business monitoring for community sales agents.
- Improve access to early warning information on disasters and climate emergencies in Dewanganj and Jamalpur Sadar, and especially for women.

### OUTCOME 2: FAMILIES EAT MORE NUTRITIOUS FOODS

- Intensify nutrition awareness in remote areas like Dewanganj, where nutrition outcomes were less significant.
- Intensify messages on the importance of improved nutrition for all women during pregnancy.
- Strengthen homestead gardening to allow vegetable production year-round.

### OUTCOME 3: FARMER HOUSEHOLDS HAVE INCREASED GENDER-EQUITABLE RELATIONS

- Continuous awareness-raising in communities around the importance of increased food intake for pregnant women; the involvement of women in farming, business and decision-making; supporting women's mobility; and challenging harmful social norms related to gender-based violence and stereotyped gender roles.
- The reliance on men's contribution to domestic work and childcare to reduce women's workload has significant limits, as women continue to work harder with men only partly supporting their wives.
- Explore opportunities to establish a community-based childcare mechanism by consulting with communities and local leaders.



Nipa (left) is sharing the skills and knowledge she learned through the NSVC project about maize production with two of her neighbours.

## For more information, contact:

**Natasha Tamplin**, Country Impact Manager  
World Vision Australia | [natasha.tamplin@worldvision.com.au](mailto:natasha.tamplin@worldvision.com.au)

**Stephen Asim R Chatterjee**, NSVC Project Manager  
World Vision Bangladesh | [asimchatterjee@wvi.org](mailto:asimchatterjee@wvi.org)

**Rivika Bisht**, Evidence Building Advisor  
World Vision Australia | [rivika.bisht@worldvision.com.au](mailto:rivika.bisht@worldvision.com.au)

**World Vision ANCP desk:** [ancp@worldvision.com.au](mailto:ancp@worldvision.com.au)

World Vision Australia acknowledges the support of the Australian Government through the Australian NGO Cooperation Program (ANCP).



**THIS MEANS THE WORLD**